PLANTED FORESTS OF THE FUTURE:

sustainable management pathways to achieve ecosystem restoration

Planted forests must help foster biodiversity, improve rural livelihoods, and support climate change mitigation if we are to achieve the targets of the Sustainable Development Goals (SDGs) and of the United Nations (UN) Decade on Ecosystem Restoration. To make these contributions, planted forests must be established and managed using good practices within a landscape context. FAO is leading the UN's efforts to provide the technical assistance and monitoring necessary to ensure these principles and practices are implemented.

KEY PRINCIPLES OF SUSTAINABLE PLANTED FORESTS

GOOD GOVERNANCE

Before preparing the soil or planting trees, establish:

inclusive planning | ***secure land tenure*** | ***a robust framework for resolution of disputes*** | ***free, prior and informed consent*** | ***recognition of local norms***.

ECOSYSTEM MANAGEMENT

The sustainable management of a planted forest takes into consideration the maintenance of:

ecosystem functions and services | ***sustainable use of biodiversity***.

ECONOMICS

Planted forests are an investment. Ensure that the costs of:

establishment | ***maintenance***

do not exceed expected incomes from the planted forest.

KEY APPROACHES TO GOOD PRACTICES IN PLANTED FORESTS

LANDSCAPE

Landscapes should include a variety of management regimes and balanced management objectives.

Embed complementary forest types in landscapes. 1 **Even-aged** commercial **plantations** can spare primary forests from conversion, 2 planted forests can quickly **restore degraded streambanks**, and 3 **planted forests between native forests** facilitate wildlife transit.

4 Involve all **stakeholders** in issues that bridge ownerships in a landscape. For example, managing potentially invasive species requires multi-stakeholder engagement.

5 Match management objectives to the site. For example, **important areas for biodiversity or water conservation** should not be converted to plantations.

FOREST MANAGEMENT UNIT

Planted forests are managed in forest management units (stands) based on the owner's objectives.

1 To enhance habitat for **wildlife** and **pollinators**, reduce planted forest density, allow natural regeneration, **leave deadwood** after harvest, and consider mixtures of **native species**.

2 To increase **carbon sequestration** and **water infiltration**, increase the length of rotations in even-aged forests, thin the stand to reduce tree density, consider multi-aged management, plant complementary species to **increase site productivity**, and **minimize soil disturbance** in site preparation and harvest.

3 To **increase production of wood**, follow good practices in the site selection, **planting**, **tending**, and **harvesting of commercial forests**. These practices will be site and species specific.

4 **Planting fruit trees**, **bamboo**, or other **non-timber forest species** with trees for timber diversifies a farm forester's portfolio when there are markets or demand for these products.

GENETIC RESOURCES

The conservation and sustainable use of tree genetic resources improves forest productivity and maintains its resilience. The sustainable management of tree genetic resources includes the conservation of genetic diversity in natural forest (in situ) or in plantations and seed banks (ex situ).

Use high-quality planting material from known sources.

Use seeds and planting material suitable for the locality and resilient to climate risks.

Establish a reliable seed system to supply planting material suitable for your goals.

Using good practices in the sustainable use of forest genetic resources is an investment that will pay off many times over through the productivity of healthy trees and forests.

Food and Agriculture Organization of the United Nations

www.fao.org/forestry/plantedforests

© FAO, 2019
CA5863EN

SHOUT
SHARE
IT